

**Testimony
U.S. House of Representatives
Committee on Energy and Commerce
September 7, 2006**

**Kurt Fredriksson
Commissioner, Alaska Department of Environmental Conservation**

Good morning. My name is Kurt Fredriksson, and I am the Commissioner of the Alaska Department of Environmental Conservation (ADEC). Thank you for the opportunity to testify before the Subcommittee regarding your review of BP's recent crude oil transmission pipeline failures on Alaska's North Slope.

Hearings like this should provide assurances to the people of the United States that Congress and the State of Alaska are diligent and vigilant in overseeing the responsible development of Alaska's important natural gas and oil resources.

My testimony today will focus on the Alaska Department of Environmental Conservation's responsibilities for oil spill prevention and response in Alaska. As requested by the Subcommittee, I will address the question of what went wrong with BP's pipeline spills, and explain what I also believe went right with these events.

To begin I want to emphasize to the Subcommittee that a thorough fact-finding investigation of BP's management of the North Slope oil field is being conducted by my department and Alaska's Department of Law. As part of the ongoing investigation, I have served subpoenas on BP and other holders of the Prudhoe Bay leases to preserve all documents related to this

occurrence and pipeline corrosion going back to 1996 (enclosure 1). After the State's investigation is complete, appropriate legal action will be taken to protect Alaska's interests.

The mission of ADEC is to protect public health and the environment. Alaska's legislature has provided the Department with very broad and comprehensive authority to carry out this mission. As the department's Commissioner, I have a duty to adopt and enforce regulations for controlling the release of pollution to Alaska's air, land, and water.

I take very seriously the department's duty to prevent and respond to the unauthorized release of oil and hazardous substances.

Prevention of spills is a major topic for today's hearing, however, it's important that I briefly describe ADEC's role in spill response.

Under Alaska law any person causing an oil spill must immediately contain and cleanup the spill to the satisfaction of ADEC. If ADEC determines the response to a spill is not adequate it may undertake cleanup itself. The spiller is also strictly liable for the state's costs incurred to respond to, and oversee the cleanup.

The response by BP and others to the Gathering Center-2 and Flow Station-2 pipeline spills has been exemplary. The spills were quickly contained, oil removed, damage to health and wildlife prevented, and impact to the environment minimized.

In addition to its responsibilities for spill response, ADEC is also authorized to adopt spill prevention regulations for pipelines. Because of the complex and sometimes conflicting pipeline nomenclature in use by various state and federal agencies let me start by clarifying ADEC pipeline regulatory terminology.

There are many different types of pipelines operating on the North Slope carrying many different types of liquids and gas for many different purposes. For purposes of this testimony I will focus on aboveground pipelines on the North Slope that are subject to the state's spill prevention authorities (enclosure 2). Pipelines that carry crude oil, water and gas from the wellhead to a processing facility are called flow lines. Flow lines carry the most corrosive fluids and make up the majority of the pipelines on the North Slope. Seawater injection and produced water pipelines are included in our definition of flow lines.

Pipelines which carry crude oil from the separation facility are defined as crude oil transmission pipelines. These are single phase pipelines which carry crude oil that has been processed to remove the water and gas carried by the flow lines.

Since 1992, the department has enforced regulatory leak detection requirements on crude oil transmission lines. There are currently no state corrosion control requirements for crude oil transmission lines. At this time there are also no state regulatory requirements for corrosion control or leak detection on flow lines. However, that is about to change as I will describe later in my testimony.

The original Plan of Development for the Prudhoe Bay reservoir projected a 42% recovery of crude oil or approximately 9.6 billion barrels. Based on these estimates Prudhoe Bay was not expected to be producing oil after 1997. Fortunately, advancements in oil field recovery technology extended the life of the Prudhoe Bay field. In the late 1990's discussions between the State of Alaska, BP and ARCO as a part of the BP/ARCO merger, led to a "Charter Agreement" for development of the Alaskan North Slope that included several environmental commitments (enclosure 3).

With extended crude oil production from Prudhoe for another generation in mind, the State negotiated seven environmental commitments in the Charter Agreement with the Prudhoe Bay operators including a specific commitment concerning corrosion that specifies;

BP and ARCO will, in consultation with ADEC, develop a performance management program for the regular review of BP's and ARCO's corrosion monitoring and related practices for non-common carrier North Slope pipelines operated by BP or ARCO. This program will include meet and confer working sessions between BP, ARCO and ADEC, scheduled on average twice per year, reports by BP and ARCO of their current and projected monitoring, maintenance and inspection practices to assess and to remedy potential or actual corrosion and other structural concerns related to these lines, and ongoing consultation with ADEC regarding environmental control technologies and management practices.

Corrosion performance management reports have been submitted annually since 2000 and are independently reviewed and audited by a nationally recognized independent engineering firm. The reports are technically oriented, and intended to ensure a corrosion management program is in place for the life of the North Slope oil fields. The annual reports are available on the department's website at: www.dec.state.ak.us/spar/ipp/corrosion/index.htm.

The engineering review process and reporting metrics for the annual reports were developed during the first year of the agreement to promote the free exchange of engineering viewpoints through report drafts, meet and confer sessions, and technical meetings to clarify questions, agree on metrics for reporting, review the application of various engineering standards, and analyze a host of complex technical matters. The process allows all parties to offer their judgment and criticism and opposing viewpoints.

Based on information provided by the Charter Agreement, the department joined with other governmental and non governmental stakeholders in 2004 to review and update Alaska's spill prevention regulations. This review led the department to propose new corrosion control regulations for flow lines.

The rationale and documented basis of need for regulating flow lines is described in the summary document for the rule making (enclosure 4). In essence, state corrosion control regulations were developed for the flow lines first because they carry a highly corrosive mixture of oil, gas and water; because they have a history of leaking; and because they represent the vast majority of the pipelines on the North Slope of Alaska. Relatively speaking, the crude oil

transmission pipelines were considered a much lower risk. The flow line regulations were two years in the making and were ready for adoption at the time that the GC-2 crude oil transmission pipeline spill occurred in March. The department immediately considered adding crude oil transmission lines to the regulatory package at the time of the spill but decided against their inclusion because the additional time required to re-public notice and conduct a hearing would unnecessarily delay implementation of the flow line regulations which were otherwise ready for adoption. We also wanted to complete the investigation into the cause of the GC-2 pipeline failure so that our regulations would benefit from the lessons learned from that incident. A separate state regulatory proposal for crude oil transmission lines remains under consideration pending further review of the actions recently proposed by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration.

Although information is still being generated and investigations are ongoing for the GC-2 and FS-2 incidents, it is apparent that the current corrosion management programs for crude oil transmission lines should be revised and expanded so as to be able to detect the effects of previously unrecognized corrosion mechanisms that could adversely impact the future safe operation of the infrastructure on the North Slope.

Pipeline corrosion issues are technically complex and the state's resources must be matched to the appropriate level of oversight. Following the GC-2 spill in March of this year, ADEC joined the Alaska Department of Natural Resources, and the Alaska Oil and Gas Conservation Commission in creating an interagency Arctic Pipeline Technology Team to coordinate the state's pipeline integrity oversight. The purpose and structure of the team is described in the

Memorandum of Agreement between the three agencies (enclosure 5). Funding for the team leader, agency support costs, and technical consulting assistance is provided under the Charter Agreement. In addition, the department has directed \$500,000 from the Charter Agreement be invested in a Pipeline Integrity Conference held in Alaska this winter to examine the latest technology and best practices for corrosion management, monitoring and inspection, and leak detection for pipelines in arctic climates.

To summarize, BP has accepted responsibility for correcting their pipeline failure and the Governor has directed the Department of Law and my department to ensure they are held accountable. Once discovered, the spills were contained and cleaned up with minimal environmental damage. Some of the best industry and government engineering experts are working the problems. The defective pipelines will be replaced. The state flow line regulations are expected to be in effect by the end of the calendar year and we will be reviewing the rule making proposed by the Pipeline and Hazardous Materials Safety Administration to determine what additional actions the state should take.

The good news for America is that production from Prudhoe Bay did not end in 1997 with 9.6 billion barrels. Approximately 11.3 billion barrels has now been recovered from Prudhoe Bay with expectations of pumping yet another 2 billion barrels. Extracting more oil from existing fields helps meet the nation's energy needs. Pipes can be fixed and production can be restored because Prudhoe Bay is not out of oil. Lessons will be learned from the state and federal investigations of these pipeline failures and technical review by our Arctic Pipeline Technology

Team. Extended production from the Prudhoe Bay field will continue to supply the nation's energy needs with an enhanced level of safety and oversight.